

What is claimed is:

1 1. A network interface, comprising:

2 a plurality of physical ports, including one primary and at  
3 least one secondary port and each providing corresponding activity  
4 status signals and a main port having said physical address;

5 a data multiplexer connected to said plurality of physical  
6 ports for selectively providing a data flow between said main port  
7 and a selected one of said primary and secondary ports according to  
8 a control signal; and

9 a controller connected to said data multiplexer for selecting  
10 which port provides data flow to and from said main port, further  
11 including

12 a management control adapted to receive control signals  
13 from a host machine and including a timer for providing an  
14 output signal at an interval programmable according to said  
15 host machine control signals,

16 a link activity detector connected to receive said  
17 primary and secondary port activity status signals and provide  
18 a corresponding signals to said management control, wherein

19 said management control timer is further responsive to  
20 the selective one of said primary and secondary port activity  
21 status signals to begin a programmed interval, and said  
22 management control further includes logic means to provide  
23 said multiplexer control signal upon receipt of said timer

24        output signal and the presence of data activity of a non-  
25        selected port, whereupon said multiplexer provides connection  
26        between said main port and said non-selected port.

1    2.    The Network Interface of claim 1, further including an  
2    operator host machine for communicating with said management logic.

1    3.    The Network Interface of claim 2, wherein said host machine  
2    further includes an applet providing selected operator control of  
3    said management logic.

1    4.    The Network Interface of claim 3, wherein said host machine  
2    applet includes a GUI providing said selected operator control.

1    5.    The Network Interface of claim 1, wherein said timer interval  
2    is programmable between 1 to 32 seconds, inclusive.

1    6.    A software multi-port control system for a local machine  
2    having an operating system, comprising:

3        a configuration manager applet operable to configure a multi-  
4    port network interface controllable by a specific local machine;  
5    and

6        a multi-port network interface driver program operable by said  
7    operating system responsive to a network interface card having  
8    selectable multiple physical ports to selectively provide data to

9 and receive data from a selected port of said network interface  
10 card according to a control signal; and  
11 a programmable timer responsive to data flow through said  
12 selected port, for providing said control signal according to a  
13 time interval programmable by said applet.